recognition site (GGG), two C's, and a 5'-monophosphate, e.g. via the Phosphate-ON reagent available from Clontech Laboratories (Palo Alto, CA). The other set of oligonucleotides begins with the addition of three C's (portion of the Sma I recognition site) and two G's, followed by nine rounds of split and mix synthesis wherein the oligonucleotide is extended by 3'-phosphoramidite derivatized 4-mers corresponding to the complements of the subunits of Table I. Synthesis is completed by the nucleotide-by-nucleotide addition of the Hind III recognition site and a 5'-monophosphate. After separation from the synthesis supports the oligonucleotides are mixed under conditions that permit formation of the following duplexes (SEO ID NO:18):

```
5'-pGGGCC(w<sub>i</sub>)(w<sub>i</sub>)(w<sub>i</sub>)(w<sub>i</sub>)(w<sub>i</sub>)(w<sub>i</sub>)(w<sub>i</sub>)(w<sub>i</sub>)(w<sub>i</sub>)A

CCCGG(**)(**)(**)(**)(**)(**)(**)(**)TTCGAp-5'
```

The mixture of duplexes is then ligated into a Sma I/Hind III-digested M13mp19. A repertoire of tag complements are synthesized on CPG microparticles as described above."

5. Please amend the paragraph in column 25, lines 61-67, as follows:

"After hybridization and ligation, as described in Example I, the loaded microparticles are treated with Fok I to produce a 4-nucleotide protruding strand of a predetermined sequence. A 10:1 mixture (probe 1:probe 2) of the following probes (SEQ ID NO:3, SEQ ID NO:8[, SEQ ID NO:9, and SEQ ID NO:10]) are ligated to the polynucleotides on microparticles."

IN THE SEQUENCE LISTING:

From columns 29 and 30, line 30, to columns 35 and 36, line 14, please delete the Sequence Listing and replace it with the following:

```
--Sequence Listing
<110> Brenner, Sydney
<120> Compositons for Sorting Polynucleotides
<130> 802-04RE
<140> US 09/366,081
<141> 1999-08-02
<150> US 08/484,712
<151> 1995-06-07
<150> US 08/358,810
<151> 1994-12-19
<150> US 08/322,348
<151> 1994-10-13
<160> 19
<170> Microsoft Word97
<210> 1
<211> 38
<212> DNA
```

```
<213> Artificial Sequence
<221> Segment of vector.
<222> n.a.
<223> n.a.
<400> 1
gaggatgcct ttatggatcc actcgagatc ccaatcca
                                                            38
<210> 2
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<221> Adaptor.
<222> n.a.
<223> n.a.
<400> 2
                                                            26
aattcggatg atgcatgcat cgaccc
<210> 3
<211> 14
<212> DNA
<213> Artificial Sequence
<220>
<221> Adaptor.
<222> n.a.
<223> n.a.
<400> 3
tcgagtcatc cgat
                                                            14
<210> 4
<211> 39
<212> DNA
<213> Artificial Sequence
<221> Tag complement.
<222> n.a.
<223> Linked to solid phase support.
ddddddddd ddddddddd ddddddtgg
                                                            39
<210> 5
<211> 68
<212> DNA
<213> Artificial Sequence
<220>
<221> Primer for synthesis of first strand of cDNA.
<222> n.a.
<223> Primer contains tag sequence.
ctagtcgacc ahhhhhhhhh hhhhhhhhhh hhhhhhhhggt
                                                           50
ttttttttt tttttt
                                                           68
<210> 6
<211> 11
```

```
<212> DNA
<213> Artificial Sequence
<220>
<221> Unsure.
<222> 1, 9-11
<223> a, c, g, t, or u
<400> 6
                                                            11
nrrgatcynn n
<210> 7
<211> 22
<212> DNA
<213> Artificial Sequence
<220>
<221> Adaptor.
<222> n.a.
<223> n.a.
<400> 7
gggtcgatgc atgcatcatc cg
                                                            22
<210> 8
<211> 10
<212> DNA
<213> Artificial Sequence
<220>
<221> Adaptor.
<222> n.a.
<223> n.a.
<400> 8
atcggatgac
                                                            10
<210> 9
<211> 43
<212> DNA
<213> Artificial Sequence
<220>
<221> Adaptor containing oligonucleotide tag.
<222> n.a.
<223> n.a.
<400> 9
tcgacchhhh hhhhhhhhh hhhhhhhhhh hha
                                                            43
<210> 10
<211> 43
<212> DNA
<213> Artificial Sequence
<220>
<221> Adaptor containing oligonucleotide tag.
<222> n.a.
<223> n.a.
<400> 10
tcgacchhhh hhhhhhhhh hhhhhhhhhh hha
                                                           43
<210> 11
<211> 11
```

```
<212> DNA
<213> Artificial Sequence
<220>
<221> Adaptor.
<222> n.a.
<223> n.a.
<400> 11
                                                              16
atcggatgac atcaac
<210> 12
<211> 20
<212> DNA
<213> Artificial Sequence
<220>
<221> Unsure.
<222> 1-3
<223> a, c, g, t, or u
<400> 12
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                                                              20
<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence
<220>
<221> Unsure.
<222> 1-3
<223> a, c, g, t, or u
<400> 13
nnncgttgat gtcatccgat
                                                              20
<210> 14
<211> 20
<212> DNA
<213> Artificial Sequence
<220>
<221> Unsure.
<222> 1-3
<223> a, c, g, t, or u
<400> 14
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                                                              20
<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence
<220>
<221> Unsure.
<222> 1-3
<223> a, c, g, t, or u
<400> 15
                                                              20
nnntgttgat gtcatccgat
<210> 16
<211> 37
```